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**José Sasián
Richard N. Youngworth**
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Introduction

The twelfth Optical System Alignment, Tolerancing, and Verification conference in 2018 was a great success. This year displayed an excellent variety of papers across the topics of alignment, tolerancing, and verification. We thank people for such excellent support for our conference's critical topics in optical engineering. We thank the effort rendered by our program committee, speakers, authors, attendees, and SPIE.

This year's conference had four strong sessions. The first session on Optical Alignment had papers on three-mirror telescope alignment using the sine condition, alignment with axicon gratings (invited), alignment and testing of a large format zoom lens for proton radiography (invited), a new technique for segment alignment in a large dimension mirror, and a related poster session paper on assembly error of cascade prism on beam scanning precision. The second session on Calibration, Measurement, and Verification had papers on the misalignment induced aberration of a miniature lens, calibration methods for a dual-wavelength interferometer system, experimental verification of compliant mirror wavefront correction, and adaptive photodetectors and the Talbot effect to measure lens focal length. The third session on Instruments and Alignment had papers on confocal microscopy for high precision optical measurements, optical alignment techniques short course (invited), assessing the W2-AM for use in profiling x-ray optics, and a novel mirror mount design. The last session on Optical Tolerancing had papers on fast tolerance analysis of optical systems for illumination, a designer's point of view on ANSI scratch and dig into ISO surface imperfections, as-fab elements: design vs. reality, increasing system stability with lower tolerances following the Taguchi Robust Design approach, Euclidean auto-calibration of stereo camera arrays, and a related poster session paper on high angular tolerance of lensed fiber coupling. All four sessions were well attended, and the authors answered many questions the audience posed to them.

This successful conference will run again in 2019. We encourage everyone interested in any related research or development projects to please submit their work and attend the conference. Please feel free to contact us, or anyone on our program committee, if you have questions, suggestions, or requests for the conference. We look forward to another successful conference next year.

José Sasián
Richard N. Youngworth